# TRAFFIC COMMITTEE RECOMMENDATION SEEKING BOARD ENDORSEMENT FOR A PEDESTRIAN-ACTIVATED TRAFFIC LIGHT AT LENOX STREET

The Traffic Committee recommends that Chevy Chase Village's Board of Managers adopt the following motion:

The Board of Manager of Chevy Chase Village urges the Maryland State Highway Administration to install a pedestrian-activated traffic light across Connecticut Avenue at Lenox Street. To provide for public safety, facilitate access to public transportation bus stops on either side of the Avenue, and other societal benefits, the Board asks that the traffic light be installed as soon as possible.

The six lanes of Connecticut Avenue, a primary North-South commuter artery into the District of Columbia, slice through the entire length of the Village. The avenue thereby impedes residents' safe and convenient passage between the Village's East and West Sides and it impedes access to and from public transportation. A pedestrian-activated traffic light would greatly improve pedestrian safety, enhance East Side residents' access to the Village's offices and the Post Office, both on the West Side, and ease access to bus stops along Connecticut. Thus, a traffic light would facilitate integration of the community and residents' participation in community affairs.

A more detailed analysis of pedestrian safety issues in crossing Connecticut Ave. are presented in the attached Talking Points entitled PEDESTRIAN CROSSING ISSUES—CONNECTICUT AVE. (MD 185), CHEVY CHASE VILLAGE, Attachment 1.

The Traffic Committee recommends a pedestrian-activated light for several reasons. Key reasons are:

- It is dangerous for pedestrians to cross Connecticut Ave. at present.

  There are no lights or marked crosswalks for more than 3,000 feet. There are six lanes and a minimal median strip. SHA planning guidance for pedestrian speed (3.5 feet/second) means that it would require about 15 seconds for an individual to cross curb-to-curb.<sup>1</sup>
- Daily traffic volume is 25,000-30,000 vehicles. The average vehicle speed on Connecticut Ave. is almost 30 MPH.<sup>2</sup> At that speed, the pedestrian fatality rate is 45 percent in crashes.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> State Highway Administration. <u>Maryland Manual of Uniform Traffic Control Devices, 2011 Edition</u>, Sec. 4E.06. http://sha.md.gov/mmutcd/2011\_Chapters\_04E.pdf

<sup>&</sup>lt;sup>2</sup> Source: Village speed camera data, 2010 and 2011.

- Nationwide, nearly 60 percent of the 34,260 pedestrian deaths in urban areas from 2000 through 2009 occurred on arterial roads such as Connecticut Ave. (MD-185).<sup>4</sup>
- The Village does not have the authority to provide safe crossing for pedestrians on its own. Because Connecticut Ave. is a state highway (MD 185), approval of the State Highway Administration is needed.
- A pedestrian-activated traffic light has been demonstrated to reduce pedestrian fatalities by as much as 69 percent by the Federal Highway Administration.<sup>5</sup>
- A marked crosswalk alone (without other traffic control devices) is not a satisfactory alternative. In fact, Federal Highway Administration analysis of more than 1,000 pedestrian crashes demonstrates that for a multi-lane road (with traffic volumes above 12,000/day), marked crosswalks are more dangerous than unmarked crosswalks at uncontrolled crossings.<sup>6</sup>.
- A pedestrian-activated traffic light (and not a light on a timer) will minimize disruptions to the through traffic on Connecticut Ave.—an important consideration in gaining approval.
- A pedestrian-activated light minimizes diversion traffic to side streets in the Village. Because the light is triggered by a pedestrian and not by a vehicle, it will not encourage left turns or crossing traffic by vehicles over present patterns of traffic. Furthermore, because West Lenox Street is a one-way street, northbound traffic on Connecticut Ave. will not make left turns at the intersection.
- Lenox Street is the most appropriate location for a pedestrian-activated light: it links both parts of the Village to the Village Hall, Post Office, and public transportation, with bus stops on either side of Connecticut Ave. at Lenox St.

<sup>&</sup>lt;sup>3</sup>FHWA Safety Program. <u>Pedestrian Safety Strategic Plan: Background Report</u>. Fig. 4. http://safety.fhwa.dot.gov/ped\_bike/pssp/background/psafety.cfm

<sup>&</sup>lt;sup>4</sup> Transportation for America. <u>Dangerous by Design 2011</u>. May 2011, p. 26. https://www.T4america.org/resources/dangerousbydesign.

<sup>&</sup>lt;sup>5</sup> Federal Highway Administration, U.S. Department of Transportation. <u>Proven Safety Countermeasures:</u> <u>Pedestrian Hybrid Beacon</u>. FHSA-SA-12-012. http://safety.fhwa.dot.gov/proven countermeasures/fhwa\_sa\_12\_012.htm.

<sup>&</sup>lt;sup>6</sup>Safety Effects of Marked versus Unmarked Crosswalks at Uncontrolled Locations: Final Report and Recommended <u>Guidelines</u>. Report FHWA-HRT-04-100. Chapel Hill, NC: University of North Carolina. August 2005. http://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf

- Locating the pedestrian-activated light at intersections other than Lenox—including midblock locations—are not as beneficial to Village residents.
   Such locations will force pedestrians seeking to reach the Village Hall,
   Post Office, or bus stop to walk greater distances to the light, which will discourage use and may lead to jaywalking.
- A pedestrian-activated traffic light is particularly valuable to Village residents who wish to remain active in the community—supporting the aging in place movement. Pedestrians 65 years and older are more vulnerable to accidents and have greater needs for public transportation and walking. Nationwide, individuals 65+ constitute 12.4 % of the population and account for 21.7 % of pedestrian deaths. "Older Americans are 96 percent more likely to be killed while walking than those under 65 years of age."

<sup>&</sup>lt;sup>7</sup> Transportation for America. <u>Dangerous by Design 2011</u>. May 2011, pp. 18 and 20. Based on death certificate information from the Centers for Disease Control. https://www.T4america.org/resources/dangerousbydesign.

#### Attachment 1

# PEDESTRIAN CROSSING ISSUES—CONNECTICUT AVE. (MD 185) CHEVY CHASE VILLAGE

# PHYSICAL CONDITIONS

- 3,200 feet between Chevy Chase Circle and Bradley Lane
- In that stretch there are:
  - No marked crosswalks
  - No pedestrian crossing lights
  - o 7 Bus Stops
- Traffic Volume—approximately 30,000 vehicle/day<sup>8</sup>
- 6 lanes of traffic
- No shoulders
- Median is less than 30 inches
- Lane width below modern standards (approximately 8 feet)
- No traffic controls connecting public transit stops

### CONNECTICUT AVE DIVIDES CHEVY CHASE VILLAGE

- Public facilities are cut off from many Village residents
  - Village Hall
  - o Police
  - Post Office
- 2,100 residents
- 720 households
- Approximately equal numbers on either side of Connecticut Ave

### VILLAGE HALL AND POST OFFICE ARE HEAVILY USED

- More than 3,200 walk-in and pickup transactions with police per year<sup>9</sup>
- More than 650 in-person visits to Village officials (permits and enforcement)<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> Source: Village speed camera data, 2010 and 2011.

<sup>&</sup>lt;sup>9</sup> Source: Police report to Village, year ending December 2011.

- More than 113 events per year in Village Hall (ranging from fewer than 10 to more than 500 individual per event)<sup>11</sup>
- About 31,650 transactions per year at Village Post Office (2,645/month on average)<sup>12</sup>
- Sources: Village data and USPS

# PEDESTRIAN USE IS DISCOURAGED BY LACK OF SAFE CROSSING

- Pedestrians must step into the roadway to have right of way
- Pedestrians do not feel safe stepping into Connecticut without added protection
  - Vehicles average 28 30 MPH at speed cameras
    - About 50,000 60,000 vehicles per year exceed 42 MPH (0.6-0.7%)
    - Violators average 45 47 MPH
    - Source: Village speed camera data
  - o Pedestrian fatalities rise with vehicle speed
    - Pedestrians struck by a vehicle travelling 20 MPH have a fatality rate of 5%
    - Pedestrians struck by a vehicle travelling 30 MPH have a fatality rate of 45%
    - Pedestrians struck by a vehicle travelling 40 MPH have a fatality rate of 85%
    - Source: Federal Highway Administration (FHWA)<sup>13</sup>
- It is dangerous to stand on the median
  - Median is narrow—less than 30 inches
  - No space for adults with children or strollers
  - No space for pedestrians with animals on leash
  - No space for stopping with a bicycle

<sup>&</sup>lt;sup>10</sup> Source: Board briefing book, monthly, 2011, projected to annual value.

<sup>&</sup>lt;sup>11</sup> Source: Board briefing book, 2011.

<sup>&</sup>lt;sup>12</sup> Source: U.S. Postal Service, memorandum Gabriel Hamilton to Jan Acton, email, Feb. 21, 2012.

<sup>&</sup>lt;sup>13</sup> FHWA Safety Program. <u>Pedestrian Safety Strategic Plan: Background Report</u>. Fig. 4. http://safety.fhwa.dot.gov/ped\_bike/pssp/background/psafety.cfm

 Individuals with physical or visual disabilities are discouraged or prevented from using public transit or participating in community activities

### PEDESTRIAN CROSS LIGHTS SAVE LIVES

- FHWA recommends pedestrian-triggered lights at uncontrolled crossings
  - The pedestrian hybrid beacon (also known as High intensity Activated crosswalk or HAWK) is a recommended FHWA safety measure<sup>14</sup>
  - HAWK signals have reduced pedestrian fatalities 69% at midblock installations and 29% overall<sup>15</sup>
  - HAWK has been tested successfully in Montgomery County (Gude Drive)<sup>16</sup>
  - In-Road Warning Lights (INWL) in crosswalk pavement has also been successfully implemented in Montgomery County and other locations<sup>17</sup>

<sup>&</sup>lt;sup>14</sup> Tony Furst, Acting Associate Administrator for Safety, FHWA Office of Safety. "ACTION: Promoting the Implementation of Proven Safety Countermeasures," Memorandum to Division Administrators, Jan 12, 2012. http://safety.fhwa.dot.gov/provencountermeasures/pc\_memo.htm

<sup>&</sup>lt;sup>15</sup> Federal Highway Administration, U.S. Department of Transportation. <u>Proven Safety Countermeasures:</u> <u>Pedestrian Hybrid Beacon</u>. FHSA-SA-12-012. http://safety.fhwa.dot.gov/proven countermeasures/fhwa\_sa\_12\_012.htm.

<sup>&</sup>lt;sup>16</sup>"Go Montgomery". Montgomery County, MD – BLOG. Downloaded 2/29/2012. http://www.montgomerycountymd.gov/apps/News/Blog/pioBlog.asp?blogID=17&Cat=Traffic%20Signal

<sup>&</sup>lt;sup>17</sup>Personal communication, Chief John Fitzgerald, Chevy Chase Village Police. See installation at Dover Air Force Base. <a href="http://www.dover.af.mil/news/story.asp?id=123122232">http://www.dover.af.mil/news/story.asp?id=123122232</a> An animated demonstration of the light is presented at <a href="http://www.crosswalks.com/">http://www.crosswalks.com/</a>

# ONLY A LIGHT WILL PERMIT PEDESTRIANS TO CROSS AT GRADE WITH A SENSE OF SAFETY

- Marked crosswalks alone do not control multilane traffic adequately according to FHWA study of 1,000 pedestrian crashes over a 5 year period
  - Pedestrian fatalities <u>increased</u> at marked crosswalks with multilane roads and traffic volume above 12,000/day compared with unmarked crosswalks<sup>18</sup>
- Traffic benefits of pedestrian-triggered lights
  - Minimizes disruption to traffic on Connecticut Ave.
  - No increased side-street diversions

# IMPROVED PEDESTRIAN ACCESS HAS VALUABLE BENEFITS

- Promotes participation in civic and governmental affairs by half of Village residents cut off from community facilities
- Health and social benefits from increased walking
- Environmental benefits from reduced vehicular traffic
- Heavy pedestrian traffic in eastern half of Village demonstrates desire to walk
  - o Parents walking children to Blessed Sacrament school
  - Walkers to all churches on Circle
  - Walkers to Chevy Chase DC facilities
  - Heavy use of Brookville Rd. after sidewalks installed
  - Fitness and dog walking in Village
- Almost no one crosses Connecticut Ave. at present for these purposes

<sup>&</sup>lt;sup>18</sup> <u>Safety Effects of Marked versus Unmarked Crosswalks at Uncontrolled Locations: Final Report and Recommended Guidelines</u>. Report FHWA-HRT-04-100. Chapel Hill, NC: University of North Carolina. August 2005. http://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf

# PEDESTRIAN ACCESS IS NECESSARY FOR LONG TERM COMMUNITY GOALS

- Nationwide, pedestrian fatalities account for nearly 12 percent of all traffic fatalities<sup>19</sup>
- Seniors 65 years and older have a 96 percent increased fatality risk as pedestrians compared with the population under 65 years of age<sup>20</sup>
- Older adults have much to gain from walking when it is safe
  - Many older adults cannot or choose not to drive
  - If they do not have safe transportation alternatives, including walking, they often become stranded in their homes
- "Aging in place" requires safe pedestrian facilities as people drive less
- People with disabilities need to use public transportation
  - Requires safe access to cross Connecticut Av to reach bus stops at Lenox St.

<sup>&</sup>lt;sup>19</sup> In the most recent decade, 2000 through 2009, more than 47,700 pedestrians were killed. Transportation for America. <u>Dangerous by Design 2011</u>. May 2011, p. 4. https://www.T4america.org/resources/dangerousbydesign.

<sup>&</sup>lt;sup>20</sup> Transportation for America. <u>Dangerous by Design 2011</u>. May 2011, pp. 18 and 20. Based on death certificate information from the Centers for Disease Control. https://www.T4america.org/resources/dangerousbydesign.